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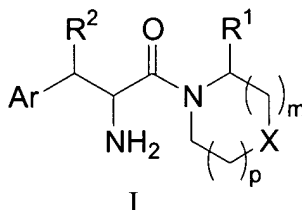
Amendment to the Claims:

Cancel Claims 19, 20, 25, and 27.

Amend Claim 28.

Listing of Claims:

1. (original) A compound of structural formula I:



or a pharmaceutically acceptable salt thereof; wherein

each n is independently 0, 1, or 2;

m and p are independently 0 or 1;

q is 1 or 2;

X is CH₂, S, CHF, or CF₂;

Ar is phenyl, unsubstituted or substituted with one to five R³ substituents;

R¹ is hydrogen or cyano;

R² is selected from the group consisting of

C₁₋₁₀ alkyl, wherein alkyl is unsubstituted or substituted with one to five substituents

independently selected from halogen or hydroxy,

C₂₋₁₀ alkenyl, wherein alkenyl is unsubstituted or substituted with one to five

substituents independently selected from halogen or hydroxy,

(CH₂)_n-aryl, wherein aryl is unsubstituted or substituted with one to five substituents

independently selected hydroxy, halogen, CO₂H, C₁₋₆ alkyloxycarbonyl, C₁₋₆

alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted

with one to five halogens,

(CH₂)_n-heteroaryl, wherein heteroaryl is unsubstituted or substituted with one to three

substituents independently selected from hydroxy, halogen, CO₂H, C₁₋₆

alkyloxycarbonyl, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens,
(CH₂)_n-heterocyclyl, wherein heterocyclyl is unsubstituted or substituted with one to three substituents independently selected from oxo, hydroxy, halogen, CO₂H, C₁₋₆ alkyloxycarbonyl, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens,
(CH₂)_n-C₃₋₆ cycloalkyl, wherein cycloalkyl is unsubstituted or substituted with one to three substituents independently selected from halogen, hydroxy, CO₂H, C₁₋₆ alkyloxycarbonyl, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens,
(CH₂)_nCOOH,
(CH₂)_nCOOC₁₋₆ alkyl,
(CH₂)_nCONR⁴R⁵, wherein R⁴ and R⁵ are independently selected from the group consisting of hydrogen, tetrazolyl, thiazolyl, (CH₂)_n-phenyl, (CH₂)_n-C₃₋₆ cycloalkyl, and C₁₋₆ alkyl, wherein alkyl is unsubstituted or substituted with one to five halogens and wherein phenyl and cycloalkyl are unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens;
or R⁴ and R⁵ together with the nitrogen atom to which they are attached form a heterocyclic ring selected from azetidine, pyrrolidine, piperidine, piperazine, and morpholine wherein said heterocyclic ring is unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens; and
wherein any methylene (CH₂) carbon atom in R² is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, C₁₋₄ alkyl, and C₁₋₄ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens;

each R³ is independently selected from the group consisting of
halogen,
cyano,
hydroxy,

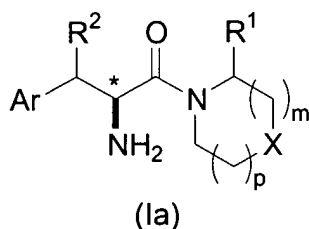
C₁₋₆ alkyl, wherein alkyl is unsubstituted or substituted with one to five halogens,
 C₁₋₆ alkoxy, wherein alkoxy is unsubstituted or substituted with one to five halogens,
 phenyloxy, unsubstituted or substituted with one to five substituents independently
 selected from halogen, hydroxy, CO₂H, cyano,
 C₁₋₆ alkyloxycarbonyl, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy
 are unsubstituted or substituted with one to five halogens;
 (CH₂)_n-NR⁴R⁵,
 (CH₂)_n-CONR⁴R⁵,
 (CH₂)_n-OCONR⁴R⁵,
 (CH₂)_n-SO₂NR⁴R⁵,
 (CH₂)_n-SO₂R⁶,
 (CH₂)_n-NR⁷SO₂R⁶,
 (CH₂)_n-NR⁷CONR⁴R⁵,
 (CH₂)_n-NR⁷COR⁷,
 (CH₂)_n-NR⁷CO₂R⁶,
 (CH₂)_n-COOH,
 (CH₂)_n-COOC₁₋₆ alkyl,
 (CH₂)_q-aryl, wherein aryl is unsubstituted or substituted with one to five substituents
 independently selected from halogen, hydroxy, CO₂H,
 C₁₋₆ alkyloxycarbonyl, C₁₋₆ alkyl, C₃₋₆ cycloalkyl, and C₁₋₆ alkoxy, wherein
 alkyl and alkoxy are unsubstituted or substituted with one to five halogens,
 (CH₂)_q-heteroaryl, wherein heteroaryl is unsubstituted or substituted with one to three
 substituents independently selected from hydroxy, halogen, CO₂H, C₁₋₆
 alkyloxycarbonyl, C₁₋₆ alkyl, C₃₋₆ cycloalkyl, and C₁₋₆ alkoxy, wherein alkyl
 and alkoxy are unsubstituted or substituted with one to five halogens,
 (CH₂)_q-heterocyclyl, wherein heterocyclyl is unsubstituted or substituted with one to
 three substituents independently selected from oxo, hydroxy, halogen, CO₂H, C₁₋₆
 alkyloxycarbonyl, C₁₋₆ alkyl, C₃₋₆ cycloalkyl, and C₁₋₆ alkoxy, wherein alkyl
 and alkoxy are unsubstituted or substituted with one to five halogens,
 (CH₂)_n-C₃₋₆ cycloalkyl, wherein cycloalkyl is unsubstituted or substituted with one to
 three substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and
 C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one
 to five halogens,
 wherein any methylene (CH₂) carbon atom in R³ is unsubstituted or substituted with one
 to two groups independently selected from halogen, hydroxy, C₁₋₄ alkyl, and C₁₋₄

alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens;

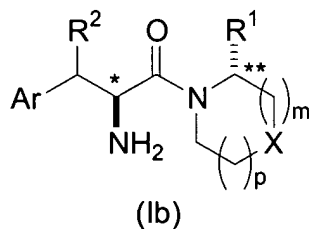
R^6 is independently selected from the group consisting of tetrazolyl, thiazolyl, $(CH_2)_n$ -phenyl, $(CH_2)_n$ -C₃₋₆ cycloalkyl, and C₁₋₆ alkyl, wherein alkyl is unsubstituted or substituted with one to five halogens and wherein phenyl and cycloalkyl are unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens, and wherein any methylene (CH_2) carbon atom in R^6 is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C₁₋₄ alkyl unsubstituted or substituted with one to five halogens; and

each R^7 is hydrogen or R^6 .

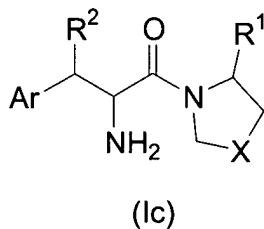
2. (original) The compound of Claim 1 wherein the carbon atom marked with an * has the stereochemical configuration as depicted in formula Ia:



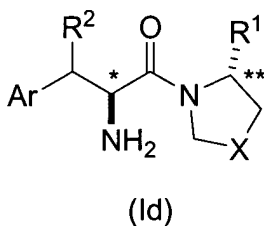
3. (original) The compound of Claim 2 wherein the carbon atom attached to R^1 marked with an ** has the stereochemical configuration as depicted in formula Ib:



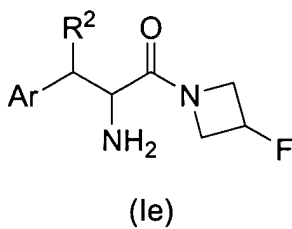
4. (original) The compound of Claim 1 of the structural formula Ic:



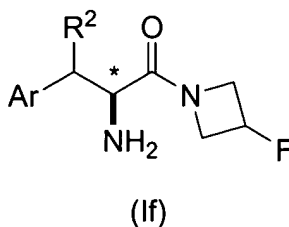
5. (original) The compound of Claim 4 wherein the carbon atom marked with an * and the carbon atom marked with an ** have the stereochemical configurations as depicted in formula Id:



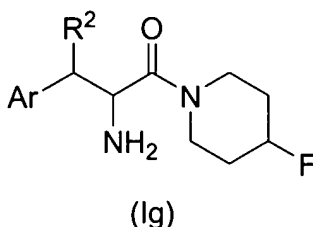
6. (original) The compound of Claim 1 of the structural formula Ie



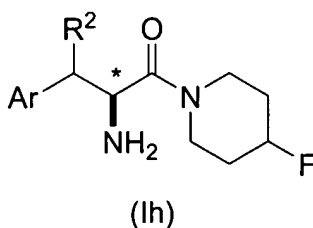
7. (original) The compound of Claim 6 wherein the carbon atom marked with an * has the stereochemical configuration as depicted in formula If:



8. (original) The compound of Claim 1 of the structural formula Ig



9. (original) The compound of Claim 8 wherein the carbon atom marked with an * has the stereochemical configuration as depicted in formula Ih:



10. (original) The compound of Claim 1 wherein R² is selected from the group consisting of

- C₁₋₆ alkyl, wherein alkyl is unsubstituted or substituted with one to five substituents independently selected from halogen or hydroxy,
- C₂₋₆ alkenyl, wherein alkenyl is unsubstituted or substituted with one to five substituents independently selected from halogen or hydroxy,
- (CH₂)_n-C₃₋₆ cycloalkyl, wherein cycloalkyl is unsubstituted or substituted with one to three substituents independently selected from halogen, hydroxy, CO₂H, C₁₋₆ alkyloxycarbonyl, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens,
- (CH₂)_nCOOH,
- (CH₂)_nCOOC₁₋₆ alkyl, and

$(\text{CH}_2)_n\text{CONR}^4\text{R}^5$, wherein R^4 and R^5 are independently selected from the group consisting of hydrogen, tetrazolyl, thiazolyl, $(\text{CH}_2)_n$ -phenyl, $(\text{CH}_2)_n$ -C₃₋₆ cycloalkyl, and C₁₋₆ alkyl, wherein alkyl is unsubstituted or substituted with one to five halogens and wherein phenyl and cycloalkyl are unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens;
or R^4 and R^5 together with the nitrogen atom to which they are attached form a heterocyclic ring selected from pyrrolidine, piperidine, piperazine, and morpholine wherein said heterocyclic ring is unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens; and
wherein any methylene (CH_2) carbon atom in R^2 is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, C₁₋₄ alkyl, and C₁₋₄ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens.

11. (original) The compound of Claim 10 wherein R^2 is selected from the group consisting of

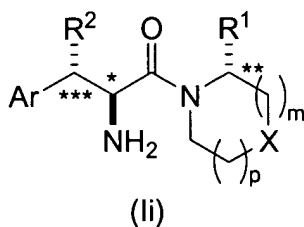
C₁₋₃ alkyl, wherein alkyl is unsubstituted or substituted with one to five substituents independently selected from halogen or hydroxy,
 CH_2 -C₃₋₆ cycloalkyl,
 COOH ,
 COOC_{1-6} alkyl, and
 CONR^4R^5 , wherein R^4 and R^5 are independently selected from the group consisting of hydrogen, tetrazolyl, thiazolyl, $(\text{CH}_2)_n$ -phenyl, $(\text{CH}_2)_n$ -C₃₋₆ cycloalkyl, and C₁₋₆ alkyl, wherein alkyl is unsubstituted or substituted with one to five halogens and wherein phenyl and cycloalkyl are unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens;
or R^4 and R^5 together with the nitrogen atom to which they are attached form a heterocyclic ring selected from pyrrolidine, piperidine, piperazine, and morpholine wherein said

heterocyclic ring is unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens.

12. (original) The compound of Claim 11 wherein R² is selected from the group consisting of

methyl,
 ethyl,
 CH₂-cyclopropyl,
 COOH,
 COOMe,
 COOEt,
 CONMe₂,
 CONH₂,
 CONHMe,
 CONHEt,
 pyrrolidin-1-ylcarbonyl,
 azetidin-1-ylcarbonyl, and
 [(tetrazol-5-yl)amino]carbonyl.

13. (original) The compound of Claim 1 wherein the carbon atom marked with an *, the carbon atom attached to R¹ marked with an **, and the carbon atom attached to R² marked with an *** have the stereochemical configurations as depicted in formula Ii:



R² is selected from the group consisting of

C₁₋₆ alkyl, wherein alkyl is unsubstituted or substituted with one to five substituents independently selected from halogen or hydroxy,
 (CH₂)_n-C₃₋₆ cycloalkyl,
 COOH,

COOC₁₋₆alkyl, and

CONR⁴R⁵, wherein R⁴ and R⁵ are independently selected from the group consisting of hydrogen, tetrazolyl, thiazolyl, (CH₂)_n-phenyl, (CH₂)_n-C₃₋₆ cycloalkyl, and C₁₋₆ alkyl, wherein alkyl is unsubstituted or substituted with one to five halogens and wherein phenyl and cycloalkyl are unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens;
or wherein R⁴ and R⁵ together with the nitrogen atom to which they are attached form a heterocyclic ring selected from pyrrolidine, piperidine, piperazine, and morpholine wherein said heterocyclic ring is unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens; and

each R³ is independently selected from the group consisting of:

halogen,
hydroxy,
C₁₋₆ alkyl, wherein alkyl is unsubstituted or substituted with one to five halogens,
C₁₋₆ alkoxy, wherein alkoxy is unsubstituted or substituted with one to five halogens,
phenyloxy, unsubstituted or substituted with one to three substituents independently selected from halogen, hydroxy, cyano, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens; and
(CH₂)_n-C₃₋₆ cycloalkyl, wherein cycloalkyl is unsubstituted or substituted with one to three substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens.

14. (original) The compound of Claim 13 wherein R² is selected from the group consisting of

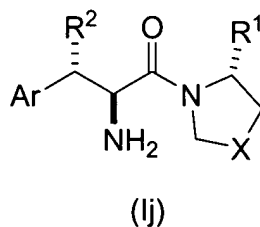
methyl,
ethyl,
CH₂-cyclopropyl,
COOH,
COOMe,
COOEt,

CONMe₂,
 CONH₂,
 CONHMe,
 CONHEt,
 pyrrolidin-1-ylcarbonyl,
 azetidin-1-ylcarbonyl, and
 [(tetrazol-5-yl)amino]carbonyl.

15. (original) The compound of Claim 14 wherein R³ is selected from the group consisting of:

fluoro,
 chloro,
 bromo,
 trifluoromethyl,
 trifluoromethoxy, and
 methoxy.

16. (original) The compound of Claim 1 of the structural formula Ij



wherein X is CH₂, S, CHF, or CF₂;

Ar is phenyl, unsubstituted or substituted with one to five R³ substituents;

R¹ is hydrogen or cyano;

R² is selected from the group consisting of

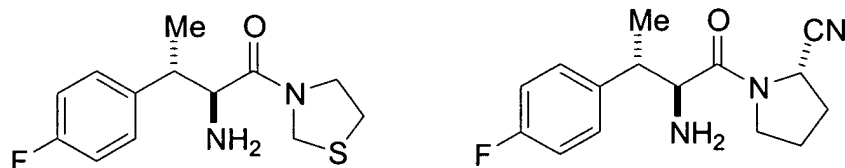
C₁₋₆ alkyl, wherein alkyl is unsubstituted or substituted with one to five substituents
 independently selected from halogen or hydroxy,
 (CH₂)_n-C₃₋₆ cycloalkyl,
 COOH,
 COOC₁₋₆ alkyl, and

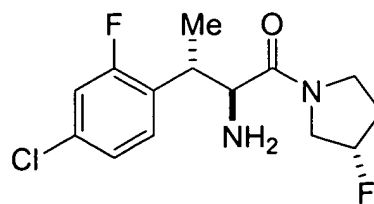
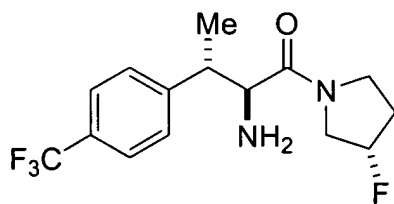
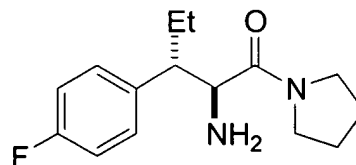
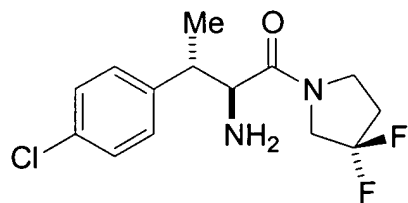
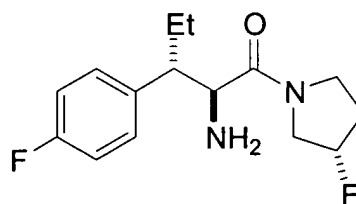
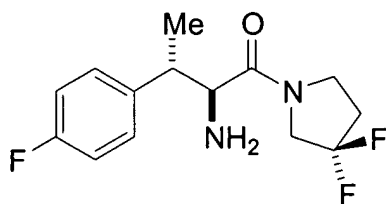
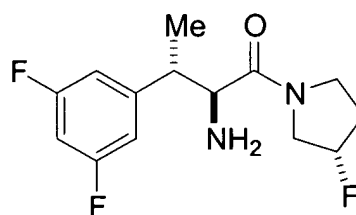
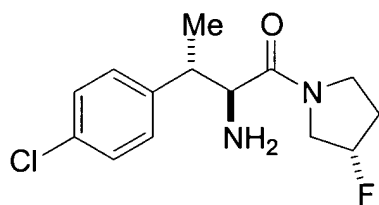
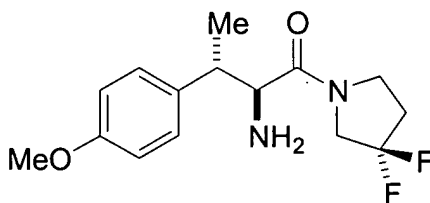
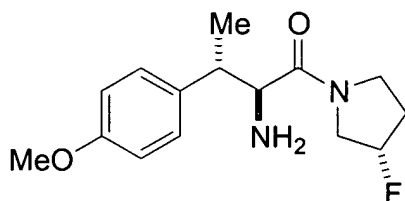
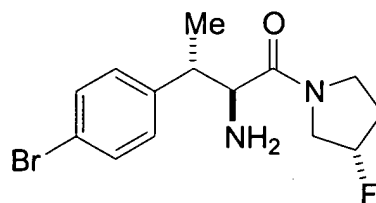
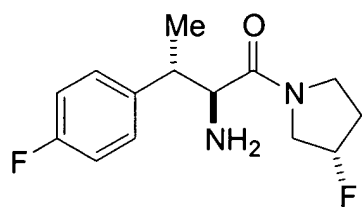
CONR⁴R⁵, wherein R⁴ and R⁵ are independently selected from the group consisting of hydrogen, tetrazolyl, thiazolyl, (CH₂)_n-phenyl, (CH₂)_n-C₃₋₆ cycloalkyl, and C₁₋₆ alkyl, wherein alkyl is unsubstituted or substituted with one to five halogens and wherein phenyl and cycloalkyl are unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens;
or R⁴ and R⁵ together with the nitrogen atom to which they are attached form a heterocyclic ring selected from pyrrolidine, piperidine, piperazine, and morpholine wherein said heterocyclic ring is unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens; and

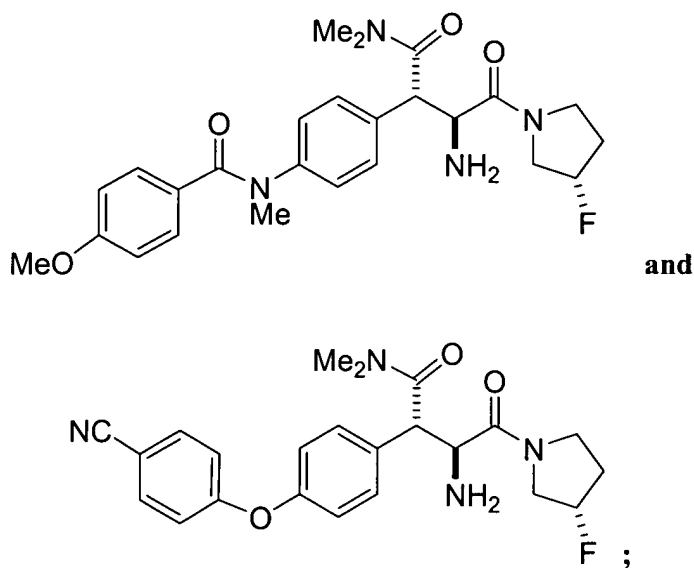
each R³ is independently selected from the group consisting of:

halogen,
C₁₋₆ alkyl, wherein alkyl is unsubstituted or substituted with one to five halogens,
C₁₋₆ alkoxy, wherein alkoxy is unsubstituted or substituted with one to five halogens,
phenyloxy, unsubstituted or substituted with one to three substituents independently selected from halogen and cyano, and
phenyl(CH₂)_nCON(Me)-, wherein phenyl is unsubstituted or substituted with one to three substituents independently selected from halogen, trifluoromethyl, and C₁₋₄ alkyl.

17. (original) The compound of Claim 16 of the structural formula selected from the group consisting of







or a pharmaceutically acceptable salt thereof.

18. (original) A pharmaceutical composition which comprises a compound of Claim 1 and a pharmaceutically acceptable carrier.

19-20. (cancelled)

21. (original) A method for treating non-insulin dependent (Type 2) diabetes in a mammal in need thereof which comprises the administration to the mammal of a therapeutically effective amount of a compound of Claim 1.

22. (original) A method for treating hyperglycemia in a mammal in need thereof which comprises the administration to the mammal of a therapeutically effective amount of a compound of Claim 1.

23. (original) A method for treating obesity in a mammal in need thereof which comprises the administration to the mammal of a therapeutically effective amount of a compound of Claim 1.

24. (original) A method for treating one or more lipid disorders selected from the group of dyslipidemia, hyperlipidemia, hypertriglyceridemia, hypercholesterolemia, low HDL

and high LDL in a mammal in need thereof which comprises the administration to the mammal of a therapeutically effective amount of a compound of Claim 1.

25. (cancelled)

26. (original) The pharmaceutical composition of Claim 18 further comprising one or more additional active ingredients selected from the group consisting of:

- (a) a second dipeptidyl peptidase IV inhibitor;
- (b) an insulin sensitizer selected from the group consisting of a PPAR γ agonist, a PPAR α / γ dual agonist, a PPAR α agonist, a biguanide, and a protein tyrosine phosphatase-1B inhibitor;
- (c) an insulin or insulin mimetic;
- (d) a sulfonylurea or other insulin secretagogue;
- (e) an α -glucosidase inhibitor;
- (f) a glucagon receptor antagonist;
- (g) GLP-1, a GLP-1 mimetic, or a GLP-1 receptor agonist;
- (h) GIP, a GIP mimetic, or a GIP receptor agonist;
- (i) PACAP, a PACAP mimetic, or a PACAP receptor agonist;
- (j) a cholesterol lowering agent such as (i) HMG-CoA reductase inhibitor, (ii) sequestrant, (iii) nicotinyl alcohol, nicotinic acid or a salt thereof, (iv) PPAR α agonist, (v) PPAR α / γ dual agonist, (vi) inhibitor of cholesterol absorption, (vii) acyl CoA:cholesterol acyltransferase inhibitor, and (viii) anti-oxidant;
- (k) a PPAR δ agonist;
- (l) an antiobesity compound;
- (m) an ileal bile acid transporter inhibitor;
- (n) an anti-inflammatory agent; and
- (o) an antihypertensive agent.

27. (cancelled)

28. (currently amended) A method of treating diabetes in a mammal in need thereof comprising administering to the mammal a therapeutically effective amount of a compound of Claim 1 in combination with metformin ~~the PPAR α / γ dual agonist KRP-297~~.